

PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Starcraft Automotive Corporation
2703 College Avenue
Goshen, Indiana 46526**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-6130-00011	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:
1 st Significant Permit Modification: SPM 039-11338-00011	Pages Affected: 5, 27, 28, 29, and 38 Pages Added: 5a, 29a, 29b, and 38a
Issued by: Paul Dubenetzky, Chief Permit Branch Office of Air Management	Issuance Date:

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary custom recreational vehicle manufacturing plant, that converts stock vans to conversion vans.

Responsible Official: Joe Custer
Source Address: 2703 College Avenue, Goshen, Indiana 46526
Mailing Address: P.O. Box 1903, Goshen, Indiana 46526
SIC Code: 3716
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) surface coating booth partitioned into four (4) sections, identified as EU-49, EU-50, EU-51, and EU-52, exhausting to stacks SV-18, SV-19, SV-20 and SV-21, respectively with a maximum capacity of coating parts for seven (7) vans per hour, using water pan for overspray control, utilized for fiberglass, and plastic substrates, equipped with HVLP and airless spray guns,
- (b) Two (2) sealer booths, identified as EU-38 and EU-39, emitting to stacks SV-7 and SV-8 respectively. Booth EU-38 is capable of using 0.90 gallon of coating per hour (gal/hr), booth EU-39 is capable of using 2 gal/hr coating, both are equipped with airless spray system. Particulate Matter (PM) paint overspray from these booths is controlled by dry filters;
- (c) One (1) fiberglass priming booth, identified as EU-45, emitting to stack SV-12. This booth is rated at 0.49 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air spray system. PM overspray is controlled by dry filters;
- (d) Three (3) body shop touch up booths, identified as EU-46, EU-47 and EU-48, emitting to stacks SV-15, SV-16 and SV-17 respectively. These booths have a total coating usage of 0.125 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air systems. PM overspray from these booths is controlled by dry filters;
- (e) Two (2) ultraviolet (UV) wood finish booths, identified as EU-56 and EU-57, emitting to stacks SV-25, and SV-26 respectively. Booth EU-56 and EU-57 are collectively rated at 1 gal/hr, equipped with HVLP spray system. PM overspray from

these booths is controlled by dry filters; and

- (f) Fabrication area (FE-1; FE-2; FE-3; FE-4 and FE-5), where various activities are performed, and emission is vented inside the building. This area is capable of using a total of 1.5 gal/hr of coatings. The coating activity done at FE-4 are applied by spray gun, The rest of the coatings are applied through aerosol cans, caulking gun, or other manual application.
- (g) A woodworking shop, equipped with various types of saws, routers, and sanders, with a maximum capacity of 1900 pounds wood per hour, using two baghouses for particulate control, and exhausting at two (2) stacks identified as 1 and 2.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Three (3) natural gas fired boilers, rated at four point two (4.2) million British thermal units per hour (MMBtu/hr), exhausting at three stacks identified as 30, 31, and 32.
- (b) Two (2) natural gas fired boilers, rated at six point two seven eight (6.278) million British thermal units per hour (MMBtu/hr), exhausting at two stacks identified as 33 and 34.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) surface coating booth partitioned into four (4) sections, identified as EU-49, EU-50, EU-51, and EU-52, exhausting to stacks SV-18, SV-19, SV-20 and SV-21 respectively with a maximum capacity of coating parts for seven (7) vans per hour, using water pan for overspray control, utilized for fiberglass, and plastic substrates, equipped with HVLP and airless spray guns;
- (b) Two (2) sealer booths, identified as EU-38 and EU-39, emitting to stacks SV-7 and SV-8 respectively. Booth EU-38 is capable of using 0.90 gallon of coating per hour (gal/hr), booth EU-39 is capable of using 2 gal/hr coating, both are equipped with airless spray system. Particulate Matter (PM) paint overspray from these booths is controlled by dry filters;
- (c) One (1) fiberglass priming booth, identified as EU-45, emitting to stack SV-12. This booth is rated at 0.49 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air spray system. PM overspray is controlled by dry filters;
- (d) Three (3) body shop touch up booths, identified as EU-46, EU-47 and EU-48, emitting to stacks SV-15, SV-16 and SV-17 respectively. These booths have a total coating usage of 0.125 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air systems. PM overspray from these booths is controlled by dry filters;
- (e) Two (2) ultraviolet (UV) wood finish booths, identified as EU-56 and EU-57, emitting to stacks SV-25, and SV-26 respectively. Booth EU-56 and EU-57 are collectively rated at 1 gal/hr, equipped with HVLP spray system. PM overspray from these booths is controlled by dry filters; and
- (f) Fabrication area (FE-1; FE-2; FE-3; FE-4 and FE-5), where various activities are performed, and emission is vented inside the building. This area is capable of using a total of 1.5 gal/hr of coatings. The coating activity done at FE-4 are applied by spray gun, The rest of the coatings are applied through aerosol cans, caulking gun, or other manual application.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Minor Source for Prevention of Significant Deterioration (PSD) 326 IAC 2-2 and 40 CR 52.21

The sourcewide Volatile Organic Compounds (VOC) input usage, shall be limited to less than 250 tons per 12 consecutive month period, rolled on a monthly basis. Compliance with this limit will make 326 IAC 2-2, PSD and 40 CFR 52.21 not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to CP 039-2790-00011, issued on April 21, 1994, the BACT determined for the one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51, and EU-52 shall be as follows:

- (a) The use of High Volume Low Pressure (HVLP) spray system, and airless spray system; and
- (b) The VOC input usage shall be limited to 134 tons per twelve-month period, rolled on a monthly basis.

Compliance with this limit shall make 326 IAC 8-1-6 (General Reduction Requirements) not applicable.

D.1.3 Volatile Organic Compounds [326 IAC 8-2-9 (Miscellaneous Metal Coating)]

- (a) The volume weighted average volatile organic compound (VOC) content of coating applied to steel from the fabrication area (FE-1, FE-2, FE-3, and FE-5) shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day, for extreme performance coatings.
- (b) The volume weighted average of the volatile organic compound (VOC) content of coatings used shall be determined using the following equation:

$$\text{lb/gal less water} = \frac{3\text{Coating} ([D * O * Q/[1-w * Dc/Dw]])}{3C}$$

Where: Dc = density of coating Dw = density of water
O = weight % organics Q = quantity of coating, gal/unit
W = percent volume water C = total coatings used, gal/unit

- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets from paint booths EU-38, EU-39, EU-56 and EU-57 shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.5 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to this rule, the PM overspray from the surface coating booths shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand

(60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Conditions D.1.1, D.1.2 and D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.8 Volatile Organic Compounds (VOC)

Compliance with the VOC emission limitation contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks (SV-7, 8, 12, 15, 16, 17, 18, 19, 20, 21, 25 and 26) while one or more of the booths being controlled are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Monitoring

- (a) Daily inspections shall be performed to verify that the water level of the water pan from the one (1) surface coating booth partitioned into four (4) sections meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. To monitor the performance of the baffles, weekly inspections of the baffle panels shall be conducted to verify placement and configuration meet recommendations of the manufacturer. In addition, weekly observations shall be made of the overspray from the surface coating booth stacks (SV-18, 19, 20 and 21) while the booth, with its four (4) partitions are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2, and D.1.3 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.1.1, D.1.2, and D.1.3.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each day;
 - (5) The total VOC usage for each day; and

- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY REPORT**

Source Name: Starcraft Automotive Corporation
Source Address: 2703 College Avenue, Goshen, Indiana, 46526
Mailing Address: P.O. Box 1903, Goshen, Indiana, 46526
Part 70 Permit No.: T039-6130-00011
1st Significant Permit Modification: 039-11338-00011
Facility: Sourcewide
Parameter: Total VOC input usage
Limit: The sourcewide Volatile Organic Compounds (VOC) input usage shall be limited to less than 250 tons per 12 consecutive month period, rolled on a monthly basis.

Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY REPORT**

Source Name: Starcraft Automotive Corporation
Source Address: 2703 College Avenue, Goshen, Indiana, 46526
Mailing Address: P.O. Box 1903, Goshen, Indiana, 46526
Part 70 Permit No.: T039-6130-00011
1st Significant Permit Modification: 039-11338-00011
Facility: The one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51 and EU-52
Parameter: Total VOC input usage
Limit: The VOC input usage from the one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51 and EU-52 shall be limited to less than 134 tons per 12 consecutive month period, rolled on a monthly basis.

Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Starcraft Automotive Corporation
Source Location:	2703 College Avenue, Goshen, Indiana 46526
County:	Elkhart
SIC Code:	3716
Operation Permit No.:	T039-6130-00011
Operation Permit Issuance Date:	June 17, 1999
Significant Permit Modification	SPM 039-11338-00011
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed a Part 70 permit modification application from Starcraft Automotive Corporation relating to the various permitted surface coating lines that were in the Part 70 permit application but were inadvertently excluded when the Part 70 permit was issued. These facilities are used by the plant that converts stock vans to conversion vans. The surface coating equipment is as follows:

- (a) Two (2) sealer booths, identified as EU-38 and EU39, emitting to stacks SV-7 and SV-8 respectively. Booth EU-38 is capable of using 0.90 gallon of coating per hour (gal/hr), booth EU-39 is capable of using 2 gal/hr coating, both are equipped with airless spray system. Particulate Matter (PM) paint overspray from these booths is controlled by dry filters;
- (b) One (1) fiberglass priming booth, identified as EU-45, emitting to stack SV-12. This booth is rated at 0.49 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air spray system. PM overspray is controlled by dry filters;
- (c) Three (3) body shop touch up booths, identified as EU-46, EU-47 and EU-48, emitting to stacks SV-15, SV-16 and SV-17 respectively. These booths have a total coating usage of 0.125 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air systems. PM overspray from these booths is controlled by dry filters;
- (d) Two (2) ultraviolet (UV) wood finish booths, identified as EU-56 and EU-57, emitting to stacks SV-25, and SV-26 respectively. Booth EU-56 and EU-57 are collectively rated at 1 gal/hr, equipped with HVLP spray system. PM overspray from these booths is controlled by dry filters; and

- (e) Fabrication area (FE-1; FE-2; FE-3; FE-4 and FE-5), where various activities are performed, and emission is vented inside the building. This area is capable of using a total of 1.5 gal/hr of coatings. The coating activity done at FE-4 are applied by spray gun, The rest of the coatings are applied through aerosol cans, caulking gun, or other manual application.

The existing equipment in Section A.2(a) permitted in the issued Part 70 permit will be amended to read as follows (changes are bolded and deletion are struck through for emphasis):

- A.2 (a) One (1) surface coating booth partitioned into four (4) sections, **identified as EU-49, EU-50, EU-51, and EU-52, exhausting to stacks SV-18, SV-19, SV-20 and SV-21 respectively** with a maximum capacity of coating parts for seven (7) vans per hour, using water pan for overspray control, utilized for fiberglass, and plastic wood substrates, equipped with HVLP and airless spray guns, ~~and exhausting at four (4) stacks identified as 3, 4, 5, and 6.~~

History

On September 15, 1999, Starcraft Automotive Corporation submitted an application to the OAM requesting to modify the Part 70 Permit T039-6130-00011 issued on June 17, 1999.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 15, 1999. Additional information was received on January 25, 2000, and some information via e-mail on January 26, 27, 28, and 31, 2000.

Emission Calculations

- (a) Surface Coating Lines Emissions: See Page 1 of 1 TSD Appendix A for detailed emission calculations.

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	83.6
PM-10	84.1
SO ₂	0.0
VOC	631.6
CO	9.1
NO _x	10.8

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Cumene	less than 10
Toluene	greater than 10
Xylenes	greater than 10
Formaldehyde	less than 10
Ethyl benzene	less than 10
Methyl Ethyl Ketone	greater than 10
Methanol	greater than 10
Methyl Isobutyl Ketone	greater than 10
TOTAL	greater than 25

Justification for Modification

The Title V permit is being modified through a Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d) in order to incorporate the applicable requirements for the above equipment that were overlooked in the Part 70 permit. The source is an existing major source that is grandfathered from the PSD rule requirements. The existing limit in the Part 70 permit will be relaxed and the sourcewide VOC emission will be limited to less than 250 tons per year. This will make the source a minor source again.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1995 OAM emission data, submitted by the source..

Pollutant	Actual Emissions (tons/year)
PM	8.6
PM-10	8.6
SO ₂	0.01
VOC	155.5
CO	0.5
NO _x	2.45

Source Status

The source is an existing major source, but grandfathered from the Prevention of Significant Deterioration (PSD) Rule Requirements, since it was originally constructed before 1977. The source has requested to be limited to less than 250 tons per year in this Part 70 permit modification to be a minor source again.

Since the VOC usage is limited to restrict the VOC emissions to less than 250 tons per year, the PM overspray emissions will also be reduced. The PM is reduced as follows:

Controlled PM overspray Emissions = 1.043 ton/yr
VOC Controlled/Uncontrolled Emissions = 631.6 ton/yr
VOC Limit = <250 ton/yr

Limited Controlled PM Overspray Emissions = $\frac{1.043 \text{ ton/yr} (<250 \text{ ton/yr})}{631.6 \text{ ton/yr}}$
= 0.41 ton/yr

Pollutant	Emissions (tons/year)
PM	0.615
PM-10	1.12
SO ₂	0.0
VOC	< 250
CO	9.1
NOx	10.8

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS):
There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration)
The source is an existing major source, but grandfathered from the Prevention of Significant Deterioration (PSD) rule requirements, since it was originally constructed before August, 1977. The source has requested to be limited to less than 250 tons per year of VOC sourcewide. Therefore, the source will be re-designated as a minor source again for PSD.
- (b) 326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year for Elkhart of volatile organic compounds (VOC). Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).
- (c) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8-1-6 (General Reduction Requirements)
This rule is applicable to facilities existing as January 1, 1980, with potential VOC emissions of 25 tons per year or greater.
 - (1) The one (1) paint booth permitted under the Part 70 permit T039-6130-00011 with four (4) partitions, identified as paint booths EU-49, EU-50, EU-51, and EU-52, exhausting to stacks B-18, B-19, B-20 and B-21 respectively, which were constructed in 1994, and have a combined potential VOC emissions of 169.36 tons per year are subject to this rule 326 IAC 8-1-6.

These booths' coating usages including solvents are limited in order to restrict the VOC emissions to less than 25 tons per year. Compliance with 326 IAC 8-1-6 will not apply in this case.
 - (2) The part of the fabrication area identified as FE-4, in which gluing carpet is done is not subject to 326 IAC 8-1-6, because the potential VOC emission of 2.36 ton/year is less than 25 tons per year.
 - (3) Although this paint booth, EU-45, exhausting to B-12 has the potential VOC emissions of 78.12 tons per year, it is not subject to 326 IAC 8-1-6, because it was constructed in 1975, which is predating the applicability of this rule.

- (b) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
Facilities existing as of November 1, 1980 of the types described in section 9 located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties, which have potential VOC emissions of 100 tons per year or greater are subject to 326 IAC 8-2-9.

The fabrication area (FE-1, FE-2, FE-3, and FE-5) was built in 1975 where various activities are done. This area is subject to 326 IAC 8-2-9, because the potential VOC emissions coming from this area is greater than 100 tons per year.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied by aerosol cans, caulking guns or other manual application at this fabrication area are limited to 3.5 pounds per gallon less water for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

The volume weighted average of the volatile organic compound (VOC) content of coatings used shall be determined using the following equation:

$$\text{lb/gal less water} = \frac{3\text{Coating } (D \cdot O \cdot Q / [1 - W \cdot D_c/D_w])}{3C}$$

Where: D_c = density of coating D_w = density of water
O = weight % organics Q = quantity of coating, gal/unit
W = percent volume water C = total coatings used, gal/unit

$$\begin{aligned} \text{lb VOC/gal less water} &= [9.8 \text{ lb/gal} \cdot 3.15 \% \cdot 0.029 \text{ gal/unit}] / [(1-0) \cdot (9.8 \text{ lb/gal} / 8.33 \text{ lb/gal})] + \\ &\quad [7.9 \text{ lb/gal} \cdot 40 \% \cdot 0.684 \text{ gal/unit}] / [(1-0) \cdot (7.9 \text{ lb/gal} / 8.33 \text{ lb/gal})] + \\ &\quad [5 \text{ lb/gal} \cdot 80 \% \cdot 0.007 \text{ gal/unit}] / [(1-0) \cdot (5 \text{ lb/gal} / 8.33 \text{ lb/gal})] \\ &= 0.72 \\ &= 2.3 / 0.72 \\ &= 3.2 \text{ lb/gal less water} < 3.5 \text{ lb/gal less water limit. This fabrication area is in compliance with the rule.} \end{aligned}$$

- (c) 326 IAC 8-2-12 (Surface Coating Emission Limitation: Wood Furniture and Cabinet Coating.
(1) Facilities existing as of July 1, 1990 of the types described in sections 2 through 13 of this rule, located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties and which have actual emissions of greater than 15 pounds of VOC per day before add on controls.

Paint booths EU-38 and EU-39, with stacks B-7, B-8 respectively, constructed in 1975 are coating wood door panels, and wood cup holder part of the conversion vans, and are subject to this rule, since they would have the potential to emit greater than 15 pounds per day of VOC.

- (2) Facilities construction of which commences after July 1, 1990, of the types described in sections 2 through 13 of this rule located in any county and which have actual VOC emissions of greater than 15 pounds per day before add on control.

Paint booths EU-56 and EU-57 with stacks 25, and 26 respectively were constructed in 1994, coating wood door panels, and wood cup holder part of the

conversion vans, are subject to this rule, since the VOC potential to emit are greater than 15 pounds per day.

326 IAC 8-2-12 requires the use one (1) or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc application system, heated airless spray application system, roller coat, brush or wipe application system or dip-and drain application system.

Booths EU-38, EU-39, EU-56 and EU-57 are in compliance with this rule, since they are using one of the listed coating application systems in the rule.

- (d) 326 IAC 2-4.1-1 (New Source Toxic Control)
This rule applies to new facility constructed after July 27, 1997 that is major for HAPs emissions. The source is not subject to this rule, since all the equipment in this application were constructed prior to the rule applicability.
- (e) 326 IAC 6-3-2 (Process Operations)
The PM emissions from the surface coating operation shall be limited using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall always be in place, and the water wash shall always be in operation whenever the paint booths are in operation.

Section D.1 in the issued Part 70 permit is revised to incorporate the applicable requirements for the additional equipment and to relax existing VOC usage limit (changes are bolded and deletions are struck-through for emphasis).

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) surface coating booth partitioned into four (4) sections, **identified as EU-49, EU-50, EU-51, and EU-52, exhausting to stacks SV-18, SV-19, SV-20 and SV-21 respectively** with a maximum capacity of coating parts for seven (7) vans per hour, using ~~dry filters~~ **water pan** for overspray control, utilized for fiberglass, ~~and plastic and wood~~ substrates, equipped with HVLP and airless spray guns, ~~and exhausting at four (4) stacks identified as 3, 4, 5, and 6.~~
- (b) **Two (2) sealer booths, identified as EU-38 and EU39, emitting to stacks SV-7 and SV-8 respectively. Booth EU-38 is capable of using 0.90 gallon of coating per hour (gal/hr), booth EU-39 is capable of using 2 gal/hr coating, both are equipped with airless spray system. Particulate Matter (PM) paint overspray from these booths is controlled by dry filters;**
- (c) **One (1) fiberglass priming booth, identified as EU-45, emitting to stack SV-12. This booth is rated at 0.49 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air spray system. PM overspray is controlled by dry filters;**
- (d) **Three (3) body shop touch up booths, identified as EU-46, EU-47 and EU-48, emitting to stacks SV-15, SV-16 and SV-17 respectively. These booths have a total coating usage of 0.125 gal/hr, equipped with High Velocity Low Pressure (HVLP) and air atomized cup air systems. PM overspray from these booths is controlled by dry filters;**
- (e) **Two (2) ultraviolet (UV) wood finish booths, identified as EU-56 and EU-57, emitting to stacks SV-25, and SV-26 respectively. Booth EU-56 and EU-57 are collectively rated at 1 gal/hr, equipped with HVLP spray system. PM overspray from these booths is controlled by dry filters; and**
- (f) **Fabrication area (FE-1; FE-2; FE-3; FE-4 and FE-5), where various activities are performed, and emission is vented inside the building. This area is capable of using a total of 1.5 gal/hr of coatings. The coating activity done at FE-4 are applied by spray gun, The rest of the coatings are applied through aerosol cans, caulking gun, or other manual application.**

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Minor Source for Prevention of Significant Deterioration (PSD) 326 IAC 2-2 and 40 CR 52.21

The sourcewide VOC input usage shall be limited to less than 250 tons per 12 consecutive month period, rolled on a monthly basis. Compliance with this limit will make 326 IAC 2-2, PSD and 40 CFR 52.21 not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to CP 039-2790-00011, issued on April 21, 1994, the BACT determined for the one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51, and EU-52 shall be as follows:

- (a) **The use of High Volume Low Pressure (HVLP) spray system, and airless spray system; and**

- (b) The VOC input usage shall be limited to 134 tons per twelve-month period, rolled on a monthly basis.

Compliance with this limit shall make 326 IAC 8-1-6 (General Reduction Requirements) not applicable.

D.1.3 Volatile Organic Compounds [326 IAC 8-2-9 (Miscellaneous Metal Coating)]

- (a) The volume weighted average volatile organic compound (VOC) content of coating applied to steel from the fabrication area (FE-1, FE-2, FE-3, and FE-5) shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day, for extreme performance coatings.

- (b) The volume weighted average of the volatile organic compound (VOC) content of coatings used shall be determined using the following equation:

$$\text{lb/gal less water} = \frac{3\text{Coating} ([D * O * Q/[1-w * Dc/Dw])}{3C}$$

Where: Dc = density of coating

O = weight % organics

W = percent volume water

Dw = density of water

Q = quantity of coating, gal/unit

C = total coatings used, gal/unit

- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets from paint booths EU-38, EU-39, EU-56 and EU-57 shall utilize one of the following application methods:

Airless Spray Application

Air Assisted Airless Spray Application

Electrostatic Spray Application

Electrostatic Bell or Disc Application

Heated Airless Spray Application

Roller Coating

Brush or Wipe Application

Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6][326 IAC 8-2-12]

Pursuant to 326 IAC 8-1-6 (BACT) and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to fiberglass and wood substrates shall be applied with high volume low pressure (HVLP) or airless spray guns. HVLP spray application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates

~~between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.~~

~~D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]~~

~~Pursuant to CP-039-2490-00011, issued on April 21, 1994, this facility shall:~~

- ~~(a) Use less than 134 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 365 consecutive day period. This usage limit is required to limit the net increase in potential to emit VOC to less than thirty-four (34) tons per 365 consecutive day period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.~~
- ~~(b) Remove the existing fiberglass operation before the initial start-up of the new painting booths, stain and seal booth, and drying oven. This condition along with condition D.1.4 makes 326 IAC 2-3 (Emission Offset Rule) and 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.~~

~~D.1.3 5 Particulate Matter (PM) [326 IAC 6-3-2(c)]~~

~~Pursuant to this rule, the PM **overspray** from the surface coating booths shall not exceed the pound per hour emission rate established as E in the following formula:~~

~~Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:~~

$$E = 4.10 P^{0.67}$$

~~where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour~~

~~D.1.4 6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.~~

Compliance Determination Requirements

~~D.1.5 7 Testing Requirements [326 IAC 2-7-6(1),(6)]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Conditions **D.1.1**, **D.1.2** and **D.1.3** shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

~~D.1.6 8 Volatile Organic Compounds (VOC)~~

~~Compliance with the VOC emission limitation contained in Conditions **D.1.1**, **D.1.2** and **D.1.3** shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.~~

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1. ~~7-9~~ Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks (~~3, 4, 5, 6~~ **SV-7, 8, 12, 15, 16, 17, 18, 19, 20, 21, 25 and 26**) while one or more of the booths being controlled are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Monitoring

- (a) Daily inspections shall be performed to verify that the water level of the water pan from the one (1) surface coating booth partitioned into four (4) sections meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. To monitor the performance of the baffles, weekly inspections of the baffle panels shall be conducted to verify placement and configuration meet recommendations of the manufacturer. In addition, weekly observations shall be made of the overspray from the surface coating booth stacks (SV-18, 19, 20 and 21) while the booth, with its four (4) partitions are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1. 811 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2, and D.1.3 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.1.1, D.1.2, and D.1.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each day;
 - (5) The total VOC usage for each day; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions **D.1.7 9 and 10**, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1. 9 11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions **D.1.1 and D.1.2** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) The existing facilities will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this plant that converts stock vans to conversion vans shall be subject to the conditions of the attached proposed **Significant Permit Modification No. SPM 039-11338-00011**.

Indiana Department of Environmental Management

Office of Air Management

Addendum to the Technical Support Document for a Part 70 Permit

Source Name: Starcraft Automotive Corporation
 Source Location: 2703 College Avenue, Goshen, Indiana 46526
 County: Elkhart
 SIC Code: 3716
 Permit Reviewer: Aida De Guzman

On March 1, 2000, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Indiana, stating that Starcraft Automotive Corporation had applied for a Significant Part 70 Permit Modification for the operation of a stationary custom recreational vehicle manufacturing plant. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 25, 2000, Starcraft Automotive Corporation submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded and deletions are struck-through for emphasis):

Comment 1: D.1.2 of the proposed permit, incorrectly limited the one (1) paint booth with four partitions, identified as EU-49, EU-50, EU-51, and EU-52 to less than 25 tons of VOC per year. A Best Available Control Technology (BACT) was determined for these booths in CP039-2790, issued in 1994, which limited them to 134 tons/year. Starcraft requests that the limit in D.1.2 of the proposed permit, and page 7 of the Technical Support Document (TSD) be returned to the original language of the Part 70 permit.

Response 1: The VOC limit for the one (1) paint booth with four partitions, identified as EU-49, EU-50, EU-51, and EU-52, was changed to 134 tons per year, since this was the BACT established for these booths in CP039-2790, and in the original Part 70 permit. However, the sourcewide VOC limit in D.1.1 of the proposed Part 70 permit stays the same at less than 250 tons per year. The change is as follows:

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

~~The VOC input usage from~~ **Pursuant to CP 039-2790-00011, issued on April 21, 1994, the BACT determined for the one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51, and EU-52 shall be limited to less than 25 tons per 12 consecutive month period, rolled on a monthly basis as follows:**

- (a) The use of High Volume Low Pressure (HVLP) spray system, and airless spray system; and**
- (b) The VOC input usage shall be limited to 134 tons per twelve-month period, rolled on a monthly basis.**

Compliance with this limit shall make 326 IAC 8-1-6 (General Reduction Requirements) not applicable.

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Please note that the following changes in the **State Rule Applicability - Individual Facilities** Section of the original TSD:

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8-1-6 (General Reduction Requirements)
This rule is applicable to facilities existing as January 1, 1980, with potential VOC emissions of 25 tons per year or greater.

- (a 1) The one (1) paint booth permitted under the Part 70 permit T039-6130-00011 with four (4) partitions, identified as paint booths EU-49, EU-50, EU-51, and EU-52, exhausting to stacks B-18, B-19, B-20 and B-21 respectively, which were constructed in 1994, and have a combined potential VOC emissions of 169.36 tons per year are subject to this rule 326 IAC 8-1-6.

Pursuant to CP 039-2790-00011, issued on April 21, 1994, the BACT determined for the one (1) paint booth with four (4) partitions, identified as EU-49, EU-50, EU-51, and EU-52 shall be as follows:

- (a) **The use of High Volume Low Pressure (HVLP) spray system, and airless spray system; and**
- (b) **The VOC input usage shall be limited to 134 tons per twelve-month period, rolled on a monthly basis.**

Compliance with this limit shall make 326 IAC 8-1-6 (General Reduction Requirements) not applicable.

~~These booths' coating usages including solvents are limited in order to restrict the VOC emissions to less than 25 tons per year. Compliance with 326 IAC 8-1-6 will not apply in this case.~~

- (b 2) The part of the fabrication area identified as FE-4, in which gluing carpet is done is not subject to 326 IAC 8-1-6, because the potential VOC emission of 2.36 ton/year is less than 25 tons per year.
- (c 3) Although this paint booth, EU-45, exhausting to B-12 has the potential VOC emissions of 78.12 tons per year, it is not subject to 326 IAC 8-1-6, because it was constructed in 1975, which is predating the applicability of this rule.
- (b) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
Facilities existing as of November 1, 1980 of the types described in section 9 located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties, which have potential VOC emissions of 100 tons per year or greater are subject to 326 IAC 8-2-9.

The fabrication area (FE-1, FE-2, FE-3, and FE-5) was built in 1975 where various activities are done. This area is subject to 326 IAC 8-2-9, because the potential VOC emissions coming from this area is greater than 100 tons per year.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied by aerosol cans, caulking guns or other manual application at this fabrication area are limited to 3.5 pounds per gallon less water for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

The volume weighted average of the volatile organic compound (VOC) content of coatings used shall be determined using the following equation:

$$\text{lb/gal less water} = \frac{3\text{Coating } (D \cdot O \cdot Q / [1 - W \cdot D_c/D_w])}{3C}$$

Where: D_c = density of coating D_w = density of water
O = weight % organics Q = quantity of coating, gal/unit
W = percent volume water C = total coatings used, gal/unit

$$\begin{aligned} \text{lb VOC/gal less water} &= [9.8 \text{ lb/gal} \cdot 3.15 \% \cdot 0.029 \text{ gal/unit}] / [(1-0) \cdot (9.8 \text{ lb/gal} / 8.33 \text{ lb/gal})] + \\ &\quad [7.9 \text{ lb/gal} \cdot 40 \% \cdot 0.684 \text{ gal/unit}] / [(1-0) \cdot (7.9 \text{ lb/gal} / 8.33 \text{ lb/gal})] + \\ &\quad [5 \text{ lb/gal} \cdot 80 \% \cdot 0.007 \text{ gal/unit}] / [(1-0) \cdot (5 \text{ lb/gal} / 8.33 \text{ lb/gal})] \\ &= 0.72 \\ &= 2.3 / 0.72 \\ &= 3.2 \text{ lb/gal less water} < 3.5 \text{ lb/gal less water limit. This fabrication area is in compliance with the rule.} \end{aligned}$$

(a c) 326 IAC 8-2-12 (Surface Coating Emission Limitation: Wood Furniture and Cabinet Coating.

- (1) Facilities existing as of July 1, 1990 of the types described in sections 2 through 13 of this rule, located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties and which have actual emissions of greater than 15 pounds of VOC per day before add on controls.

Paint booths EU-38 and EU-39, with stacks B-7, B-8 respectively, constructed in 1975 are coating wood door panels, and wood cup holder part of the conversion vans, and are subject to this rule, since they would have the potential to emit greater than 15 pounds per day of VOC.

- (2) Facilities construction of which commences after July 1, 1990, of the types described in sections 2 through 13 of this rule located in any county and which have actual VOC emissions of greater than 15 pounds per day before add on control.

Paint booths EU-56 and EU-57 with stacks 25, and 26 respectively were constructed in 1994, coating wood door panels, and wood cup holder part of the conversion vans, are subject to this rule, since the VOC potential to emit are greater than 15 pounds per day.

326 IAC 8-2-12 requires the use one (1) or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc application system, heated airless spray application system, roller coat, brush or wipe application system or dip-and drain application system.

Booths EU-38, EU-39, EU-56 and EU-57 are in compliance with this rule, since they are using one of the listed coating application systems in the rule.

(b d) 326 IAC 2-4.1-1 (New Source Toxic Control)

This rule applies to new facility constructed after July 27, 1997 that is major for HAPs emissions. The source is not subject to this rule, since all the equipment in this application were constructed prior to the rule applicability.

(e e) 326 IAC 6-3-2 (Process Operations)

The PM emissions from the surface coating operation shall be limited using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall always be in place, and the water wash shall always be in operation whenever the paint booths are in operation.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Starcraft Automotive Corporation
Address City: 2703 College Avenue, Goshen, Indiana 46526
CP: 039-11338
Pft ID: 039-00011
Reviewer: Aida De Guzman
Date: January 26, 2018

Booths/Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	PM Overspray Controlled Emissions (tons/yr)	lb VOC/gal solids	Substrate	Transfer Efficiency
B-26, 25																		
Catalyst	9.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.02000	1.000	9.75	9.75	0.20	4.68	0.85	0.00		ERR	wood	65%
Clear	8.4	28.20%	0.0%	28.2%	0.0%	71.58%	1.00000	1.000	2.36	2.36	2.36	56.72	10.35	9.22	DF -0.18	3.30	wood	65%
B-8																		
Wipe Stain	7.7	79.60%	0.0%	79.6%	0.0%	14.00%	0.00350	1.000	6.15	6.15	0.02	0.52	0.09	0.01		43.89	wood	65%
Opticlear	7.8	67.95%	0.0%	68.0%	0.0%	22.26%	0.90000	1.000	5.27	5.27	4.75	113.90	20.79	3.43	DF - 0.1	23.69	wood	65%
S-177 Stain	7.3	96.60%	0.0%	96.6%	0.0%	2.74%	0.13000	1.000	7.05	7.05	0.92	22.00	4.02	0.05		257.36	wood	65%
B-7																		
Isolante	8.1	67.33%	0.0%	67.3%	0.0%	31.50%	0.24000	1.000	5.42	5.42	1.30	31.22	5.70	0.97		17.21	wood	65%
Co Acc	7.6	86.00%	0.0%	86.0%	0.0%	13.05%	0.01000	1.000	6.49	6.49	0.06	1.56	0.28	0.02		49.75	wood	65%
Optiset	8.8	9.00%	0.0%	9.0%	0.0%	40.85%	2.00000	1.000	0.79	0.79	1.58	38.02	6.94	24.55	DF -0.5	1.94	wood	65%
Styrene	7.5	100.00%	0.0%	100.0%	0.0%	0.00%	0.00200	1.000	7.50	7.50	0.02	0.36	0.07	0.00		ERR	wood	65%
FE-2																		
Cleaning agent Pre	6.4	100.00%	0.0%	100.0%	0.0%	0.00%	0.15600	7.000	6.40	6.40	6.99	167.73	30.61	0.00		ERR		100%
FE-5																		
Sikaflex	9.8	3.15%	0.0%	3.2%	0.0%	94.70%	0.02900	7.000	0.31	0.31	0.06	1.50	0.27	0.00		0.33	steel	100%
Surebond 190	7.9	40.00%	0.0%	40.0%	0.0%	57.20%	0.68400	7.000	3.16	3.16	15.15	363.58	66.35	0.00		5.53	steel	100%
FE-2, 3																		
Cleaning agent CM	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.23000	7.000	6.71	6.71	10.80	259.27	47.32	0.00		ERR		100%
FE-1,3																		
Spray Rite	5.0	80.00%	0.0%	80.0%	0.0%	25.17%	0.00700	7.000	4.03	4.03	0.20	4.74	0.87	0.00		16.02	steel	100%
FE-4																		
Cammie 22/90	5.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.01300	7.000	5.91	5.91	0.54	12.91	2.36	0.00		ERR	carpet	100%
Fastbond	8.9	50.00%	50.0%	0.0%	49.1%	44.87%	0.40000	5.000	0.00	0.00	0.00	0.00	0.00	0.00		0.00	carpet	100%
Cleaning agent CM	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.01250	5.000	6.71	6.71	0.42	10.07	1.84	0.00		ERR	carpet	100%
Spray Rite	5.0	80.00%	0.0%	80.0%	0.0%	25.17%	0.00700	5.000	4.03	4.03	0.14	3.39	0.62	0.00		16.02	carpet	100%
B-18, 19																		
41 black	7.1	65.87%	0.0%	65.9%	0.0%	9.00%	0.49000	7.000	4.67	4.67	16.02	384.45	70.16	12.72	WW - 0.013	51.89	fiberglass	65%
Ford White	7.6	80.50%	0.0%	80.5%	0.0%	10.30%	0.49000	7.000	6.14	6.14	21.07	505.62	92.28	7.82		59.63	fiberglass	65%
Ford 95	7.6	80.50%	0.0%	80.5%	0.0%	10.30%	0.49000	7.000	6.14	6.14	21.07	505.62	92.28	7.82		59.63	fiberglass	65%
GM50	7.6	68.41%	0.0%	68.4%	0.0%	14.20%	0.49000	7.000	5.22	5.22	17.90	429.68	78.42	12.67		36.76	fiberglass	65%
B-12																		
Variprime 615S	9.7	53.55%	0.0%	53.6%	0.0%	25.14%	0.49000	7.000	5.20	5.20	17.83	428.04	78.12	23.69	DF-0.23	20.68	fiberglass	65%
B20, 21																		
Clear	8.1	63.30%	0.0%	63.3%	0.0%	31.94%	0.49000	7.000	5.13	5.13	17.60	422.34	77.08	15.64	WW - 0.02	16.06	fiberglass	65%
B-15, 16, & B17																		
41 black	7.1	0.125 gal/hr * 7.1 lb/gal * 65.87% VOC * ton/2000 lb * 8760 hr/yr = 2.5 ton/yr											2.50	0.46			fiberglass	65%
Ford White	7.6	0.125 gal/hr * 7.6 lb/gal * 80.5% VOC * ton/2000 lb * 8760 hr/yr = 3.3 ton/yr											3.30	0.28			fiberglass	65%
Ford 95	7.6	0.125 gal/hr * 7.6 lb/gal * 80.5% VOC * ton/2000 lb * 8760 hr/yr = 3.3 ton/yr											3.30	0.28			fiberglass	65%
GM50	7.6	0.125 gal/hr * 7.6 lb/gal * 68.4% VOC * ton/2000 lb * 8760 hr/yr = 2.8 ton/yr											2.80	0.46	DF - 0.005		fiberglass	65%
ALL Booths																		
Thinner	7.0	100.00%	0.0%	100.0%	0.0%	0.00%	0.91000	7.000	7.00	7.00	44.59	1070.16	195.30	0.00		ERR		0%

State Potential Emissions Add worst case coating to all solvents 631.60 83.4 0.813
Note: PM overspray control: DF = dry filter 98% efficiency; WW = water wash 99.9% efficiency
METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

